Ford Motor Co, Allen Park
D.5
6/18/82

June 18, 1982

TO: R. Johns, Air Quality Division
W. Bradford, Resource Recovery Division
W. Denniston, Water Quality Division

FROM: Al Howard, Chief
Office of Hazardous Waste Management, ESD

SUBJECT: Ford Allen Park Clay Mine Appeal for Non-Hazardous Designation of Leachate

Attached is an appeal for non-hazardous designation of leachate generated from the disposal of K087 and K061 waste at Ford Allen Park Clay Mine.

Please review and provide comments and recommendations by July 1, 1982.

If you have any questions, please contact Joan Peck.

tkr
Attachment

Ford Motor Company
Environmental and Safety
Engineering Staff

One Parklane Boulevard
Dearborn, Michigan 48126

Mr. Del Rector, Chief
Environmental Services Division
Michigan Department of
Natural Resources
P.O. Box 30028
Lansing, MI 48909

May 7, 1982

Subject: Appeal of Hazardous Waste Designation
Ford Allen Park Clay Mine
Michigan Act 64 Operating License Application No. 342

Dear Mr. Rector:

Pursuant to Michigan Act 64 Rule 204, transmitted herewith is an Appeal of Hazardous Waste Designation involving accumulated stormwater now contained in the hazardous waste disposal cell at the subject facility.

Based on the attached report and supporting analytical data, we believe that this wastewater is clearly non-hazardous in nature and request that it be so designated by Michigan DNR.

Improved operating practices at the Ford Allen Park Clay Mine should reduce the quantity of this wastewater that will be generated in the future. As we have previously discussed with you and your staff on a number of occasions, we plan to introduce this wastewater into the Detroit Water and Sewerage Department (DWSD) system. Appropriate authorizations from DWSD and the City of Allen Park are now being pursued.

Very truly yours,

A. B. M. Houston, Manager
Compliance and Liaison Department
Stationary Source
Environmental Control Office
313/594-0324

Enclosure

ATTACHMENT
May 7, 1982

Appeal of Hazardous Waste Designation
Ford Allen Park Clay Mine

Overview:

The Ford Allen Park Clay Mine (APCM) has landfilled approximately 80,000 yards^3 of waste in Cell I. Approximately 15% of this volume is hazardous waste -- 9% electric furnace dust (K061) and 6% decanter tar sludge (K087). Since November 1981, approximately one million gallons of runoff from this fill has commingled with four million gallons of rainwater, all of which accumulate in the cell bottom. Pursuant to Michigan Act 64 Rule 204, this appeal is intended to demonstrate that the five million gallons of wastewater now impounded in cell I do not "possess the hazard characteristics which led to its listing" as specified in the regulations. Accordingly, a non-hazardous designation for this wastewater is requested. Additional description of the APCM site and of the accumlated rainwater may be found in the facility's pending Act 64 Operating License application.

Waste Quantities:

The following types and estimated quantities of waste have been landfilled in hazardous waste Cell I from the advent of RCRA (November 1980) to date:

K061	7,000 yds^3
K087	5,000 yds^3
Blast Furnace Filter Cake (nonhazardous)	30,000 yds^3
Other Type II Solid Wastes (nonhazardous)	38,000 yds^3
Total Fill Volume	80,000 yds^3

Basis for Listing:

Attached for your information are copies of the U.S. EPA Listing Background Documents for "K087: Decanter Tank Tar Sludge from Coking Operations" (January 12, 1981) and "K061: Emission Control Dusts/Sludges from the Primary Production of Steel in Electric Furnaces" (November 14, 1980). These documents summarize available information as to the nature of the two wastes, and identify the hazardous constituents which led to their listing. They are:

K087: phenol, naphthalene
K061: lead, cadmium, chromium - hexavalent

Sampling Data:

Procedures employed in obtaining samples of the wastewater impounded in Cell I are summarized in the Appendix. Please note that parameters analyzed included all EP toxicity heavy metals (which include lead, cadmium, and chromium), as well as phenol and naphthalene. The laboratory results attached to the Appendix reveal that all of the constituent concentrations are at or less than analytical detection levels. All of these values are also well below the limitations established in the EPA Background listing Documents as necessary to protect human health.

Conclusion:

Notwithstanding the MDNR interpretation of Act 64 Rule 418(3) that "any leachate collected during landfilling operations.....shall be considered a hazardous waste", we believe that this demonstration satisfactorily proves that the impounded wastewater at the APCM should be designated nonhazardous.

Prepared by: Stationary Source Environmental
Control Office
FORD MOTOR COMPANY

JSA/PSC

Appendix

May 7, 1982

Ford Allen Park Clay Mine
Sampling Data Sheet

Accumulated stormwater within the hazardous waste disposal cell at the Allen Park Clay Mine facility was sampled twice for E.P. toxicity metals plus phenol and naphthalene. The dates of sample collection were March 22, 1982 and April 26, 1982. On both dates samples were acquired in the same manner.

Three containers, two French liter glass plus one 250 ml plastic were utilized in the sample collection process. The samples consisted of a composite from 5 locations around the northwest end of the cell. (The northwest end is currently where wastes are being deposited and represents a "worst-case" situation.) The composites were collected by transferring 200 mls of ponded water, using a glass beaker, to each of the two French liter containers, and 50 mls to the 250 ml plastic container. After the 5 locations were sampled the containers were placed on ice and immediately returned to the laboratory for filtration and preservation.

A 50 ml portion of the metals sample was filtered through a 45 um filter and subsequently acidified with nitric acid to a pH less than 2. The phenol sample was also acidified with phosphoric acid to pH 2 and then 1 gram of $CuSO_4$ was added. The naphthalene sample required no preservation. The samples were then sent to Hydro Research Services in Pontiac, Michigan for analysis.

Results of the analyses are summarized on the following pages. Analytical procedures utilized conformed to those outlined in EPA Publication SW-846, "Test Methods for Evaluating Solid Waste," 1980.

Prepared by:

Survey and Evaluation
Stationary Source Environmental
Control Office

CLOW
HYDRO RESEARCH SERVICES
Water Management Division
Clow Corporation

408 Auburn Avenue.
Pontiac, MI 48058

313 334-1630
313 334-4747

May 4, 1982

Ford Motor Company
SSECO
Parklane Towers, Suite 628W
One Parklane Blvd.
Dearborn, MI 48126
Attn: Ed Chraszcz

Sample dated: 4-26-82 , PN #713125

Hydro Number:	55118
Client Identification:	Allen Park Clay Mine Pond
Phenol by GC, ug/l	< 30
Napthalene, ug/l	< 30
Arsenic, As, mg/l	0.008
Barium, Ba, mg/l	< 1
Cadmium, Cd, mg/l	< 0.01
Total Chromium, Cr, mg/l	< 0.02
Lead, Pb, mg/l	0.06
Mercury, Hg, mg/l	< 0.0005
Selenium, Se, mg/l	< 0.005
Silver, Ag, mg/l	< 0.02
Copper, Cu, mg/l	< 0.02
Nickel, Ni, mg/l	0.04
Zinc, Zn, mg/l	0.10

cc: Dave Miller

Linda Deans
Linda Deans
General Laboratory Manager

CLOW
HYDRO RESEARCH SERVICES
Water Management Division
Clow Corporation
408 Auburn Avenue
Pontiac, MI. 48058
313 334-1630
313 334-4747

April 13, 1982

Ford Motor Company
SSECO
ParkIane Towers, Suite 628W
One Parkland Blvd.
Dearborn, MI 48126
Att: Mr. Ed Chrasz

Sample received 3-23-82. PN # 771584

Hydro Number	54346
Client identification	Allen Park Clay Mine Leachate SSECO #203220274
Arsenic, As, mg/l	< 0.01
Barium, Ba, mg/l	< 1
Cadmium, Cd, mg/l	< 0.01
Total Chromium, Cr, mg/l	0.02
Lead, Pb, mg/l	< 0.05
Mercury, Hg, mg/l	< 0.001
Selenium, Se, mg/l	< 0.01
Silver, Ag, mg/l	< 0.02
Copper, Cu, mg/l	< 0.02
Nickel, Ni, mg/l	< 0.02
Zinc, Zn, mg/l	< 0.02

Linda Deans
Linda Deans
General Laboratory Manager

HYDRO RESEARCH SERVICES
Water Management Division
Clow Corporation

408 Auburn Avenue
Pontiac, MI 48058

313 334-1630
313 334-4747

April 9, 1982

Ford Motor Company
SSECO
Parkland Towers, Suite 628W
One Parklane Blvd.
Dearborn, MI 48126

Attn: Ed Chrasz

Sample received 3-23-82.

Hydro number:	54347
Client identification	Allen Park Clay Mine 203220274
Phenol, mg/l (by GC)	0.03
Naphthalene, mg/l	<0.01

cc: Dave Miller

Linda Deans
Linda Deans
General Laboratory Manager